15

5

## Abstract

A method, computer program product, and a publication-subscription broker server computing system for filtering one or more messages for transmission to a subscriber computing system according to an individual information request criteria using binary decision diagrams. The computer program product contains instructions that implement the disclosed method. The publication-subscription broker server contains a computer process that implements the disclosed method. The method constructs an evaluation graph for each individual information request criteria specified for each subscriber, identifies logical implications from one or more binary decision diagrams from a first information request criteria to one or more corresponding binary decision diagrams within a second information request criteria, receives one or more messages to be filtered, evaluates a first information request criteria based upon information within the received messages, evaluates one or more information request criteria based upon information within the received messages using the identified logical implications between one or more binary decision diagrams within the information request criteria being evaluated and one or more binary decision diagrams previously evaluated, and transmits the received message to the subscriber computing system corresponding to an information request criteria evaluated to be satisfied by information contained within the received message.